Exploring the student's interaction with augmented reality and their relationship to learning achievement

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ABSTRACT
Augmented Reality (AR) is one of the latest technology that has grown significantly due to its effectiveness in various fields includein education field. AR can be defined as a technology where virtual object can be overlaid into real environment in real time. AR can serve as an effective tool to ensure the learning process more attractive and engage the student.However, previous studies on AR have not provided an in-depth investigation of the learning process, especially the interaction involved in student while they use an AR. Therefore, this study aimed to determine the student interaction and their performance in subject content, and their relationship between them while using AR. A quantitative research design was employed with 34 grade 5 elementary school students as respondents. The results of the content analysis towards student interaction with the AR demonstrates that turning the AR markers, inspecting the AR elements and commenting on the AR elements are recorded as the highest number of interactions compared to others. Results from a Spearman correlation analysis show that there are six interactions that have significant correlations with achievement in science among the students with the correlation direction of each relationship is positive.

KEYWORDS
Augmented reality; Interaction; Mixed reality

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